

Proposed Amended Claims

1. An electrical device for use with an exhaustible power source (101) and a light source (105) which is powered by the said power source, said device including at least one signal switch (102) and a microchip (103) in communication with the signal switch and the power source and which is characterised in that the signal switch is a non-energy transferring MMI signal switch (102), and said signal switch not being a serial part of an energy transfer circuit from the power source to the load (105), and in that the microchip includes means (202) for controlling an on/off function between the power source and the light source, and means for providing at least one of the following in response to the receipt of at least one signal from the signal switch:

- (a) a delayed shut off function (1104) and
- (b) a find-in-the-dark function (1104) by activating an indicator.

2. The electrical device of claim 1 characterised in that the microchip (103) controls at least one other function selected from the following :

- a power adjusting function;
- an oscillating or light flashing function;
- an intermittent code sequence function; and
- a determination of the charge remaining in the power source function.

3. The electrical device of claim 2 characterised in that the microchip (103) recognizes that a number of successive activation/deactivation signals received from the signal switch (102) corresponds to a particular specific said at least one other function.

4. The electrical device of any one of claims 1 to 3 characterised in that the microchip is adapted for single wire input operation that connects to the signal switch (102).

5. The electrical device of any one of claims 1 to 4 characterised in that the microchip recognizes that the receipt of different voltages from the signal switch corresponds to different command functions.

6. The electrical device of any one of claims 1 to 5 characterised in that said signal switch includes more than one input means (1004 - 1007) with each input means indicating a different command function recognizable by the microchip.

7. The electrical device of any one of claims 1 to 6 characterised in that the signal switch (102) is a multi-mode switch which, in each mode, controls a different function.

8. The electrical device of any one of claims 1 to 7 characterised in that the function of the signal switch is dependent on the time period of the switch

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actuation, or the time period between successive actuations of the signal switch or a combination thereof.

9. The electrical device of any one of claims 1 to 8 which is characterised in that it includes:

only two connections from the microchip to the power source and the said light source;

an energy storage device (205); and

a power switch (202) for controlling energy flow from the power source (101) to the light source (105), and wherein:

when the power switch is closed, energy from the storage device is used to power the microchip and, when the power switch is open, energy from the power source is used to power the microchip.

10. The electrical device according to claim 9 characterised in that energy from the power source (101) is stored in the energy storage device (205) when the power switch is open.

11. The electrical device according to claim 10 characterised in that the energy storage device is a capacitor.

12. The electrical device according to claim 9 characterised in that the energy storage device is a battery.

13. The electrical device according to claim 10 or 11 characterised in that the microchip (103) monitors the quantity of energy in the energy storage device and causes the power switch to open when the said quantity of energy falls below a predetermined level.

14. The electrical device according to any one of claims 10 to 12 characterised in that the microchip (103) causes the power switch (202) to open and close at regular time intervals to cause regular recharging of the energy storage device (205).

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